March 1, 2011

Energy and Technology Committee Legislative Office Building Hartford, CT

Re: <u>Senate Bill No. 102 "AN ACT EXPANDING THE DEFINITION OF A CLASS 1 RENEWABLE ENERGY SOURCE."</u>

Dear Members of the Energy and Technology Committee,

Good Afternoon, I am Gary Zrelak, Director of Operations for the Greater New Haven Water Pollution Control Authority (GNHWPCA). I would like to speak in favor of Senate Bill 102 "An Act Expanding the Definition of a Class 1 Renewable Energy Source."

The GNHWPCA operates a 40 MGD wastewater treatment facility serving New Haven, Hamden, East Haven and Woodbridge, a total population of approximately 200,000 people. The byproduct from cleaning the wastewater is biosolids. Currently the GNHWPCA disposes of ~40 dry tons per day of biosolids produced here in the state. Thermal Destruction is used by the GNHWPCA to dispose of the biosolids and create energy.

The biosolids removed from the wastewater are processed into the multiple hearth incinerator where the organic portion is thermally oxidized. The exhaust gas from this process is ~1200 degrees; this heat is currently quenched down to ~150 degrees in the Venturi Scrubber, followed by a Wet Electrostatic Precipitator and then a Regenerative Thermal Oxidizer before being discharged to the atmosphere. The GNHWPCA will take this 1200-degree gas and put it through a boiler that will convert the heat into steam energy that will turn a turbine, which will then turn a generator. The exhaust gas is then put back through the existing pollution control equipment train and receives the same level of treatment as is currently being done. The pollution control equipment meets all regulatory requirements. The generator will produce ~4,000,000 kw per year which is approximately 1/3 of the power needed by the facility. This power savings reduces operating costs, which directly offsets the rate thus a saving for the ratepayers.

Greater New Haven Waser Politicien Control Authority

The passage of this bill will allow us to receive renewable energy credits for the process we currently use to dispose of biosolids, and would benefit the GNHWPCA's ratepayers directly by decreasing the expenses of operating this power generation equipment. I hope that this committee will support this bill and I would be happy to answer any questions.

Sincerely,

Gary Zrelak Director of Operations GNHWPCA

cc: Sid Holbrook, GNHWPCA Executive Director Gabe Varca, GNHWPCA Director of Finance Tom Sgroi, GNHWPCA Director of Engineering